AMENDED PROPOSED PLAN OF REMEDIAL ACTION

Chrysler Newark Assembly Plant Site – Operable Unit 3
(-AKA- University of Delaware's Science, Technology and Advanced Research Campus)
Newark, Delaware
DNREC Project No. DE-0105

April 2018

Delaware Department of Natural Resources and Environmental Control
Division of Waste and Hazardous Substances
Site Investigation & Restoration Section
391 Lukens Drive
New Castle, Delaware 19720

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Approval:

This Proposed Plan meets the requirements of the Hazardous Substance Cleanup Act.

Approved by:

for TJR

Timothy Ratsep, Environmental Program Administrator
Site Investigation & Restoration Section

4/23/18

Date

Chrysler Newark Assembly Plant Site (OU-3)

What is the Amended Proposed Plan of Remedial Action?

The Proposed Plan of Remedial Action (PPRA) summarizes the clean-up (remedial) actions that are being proposed to address contamination found at the Site for public comment. A legal notice is published in the newspaper for a 20-day comment period. DNREC considers and addresses all public comments received and publishes a Final Plan of Remedial Action (Final Plan) for the Site.

When new information regarding the release of contamination is identified at a Site after the Proposed Plan or Final Plan has been issued, an Amended Proposed Plan must be issued to once again solicit public comment. DNREC uses a comprehensive assessment process, which includes the additional data, to develop the new proposal for remedial action at the Site.

What is the Chrysler Newark Assembly Plant Site (OU-3)?

The Site is the former location of the Chrysler Newark Assembly Plant. The Site is located at 550 South College Avenue in Newark, Delaware and consists of two tax parcels: 18-039.009-002 and 18-036.00-002 (Figure 1). The nearest major intersection is South College Avenue (Route 896) and Mopar Drive.

The Site has been divided into operable units or smaller areas to more easily manage its investigation and cleanup. **This Amended Proposed Plan specifically addresses Operable Unit 3 (OU-3) of the Site.** OU-3 is approximately 68 acres in size, and the boundaries are depicted on Figure 2. The OU-3 portion of the Site is generally flat. The majority of the area is covered with bituminous concrete paving, except for the North Tank Farm area which was backfilled with DNREC-approved soil after the removal of the underground storage tanks in 2010. Also, the Administration Building remains on the property.

The Site is owned by 1743 Holdings, LLC and has been designated as a Certified Brownfields Site. 1743 Holdings, LLC entered into a Brownfields Development Agreement (BDA) with the Department of Natural Resources and Environmental Control (DNREC) to perform a Brownfield Investigation and address contamination determined to be present on the Site.

What happened at the Chrysler Newark Assembly Plant Site (OU-3)?

Prior to the 1950s, the OU-3 portion of the Site was utilized for agricultural purposes. Between the early 1950s and 2008, when plant operations ceased, various structures located on OU-3 were associated with military tank assembly and testing operations (until 1956), and most recently vehicle assembly. These structures included: railroad spurs, vehicle shipping lots, electrical substations, a natural gas substation, and both aboveground and underground storage tanks with

associated piping designed to carry fluids into specific buildings. In certain areas of OU-3, soil and groundwater have been negatively impacted due to the past use of slag (containing coal) as fill in the former Silver Brook floodplain, past releases from former underground storage tanks (for example, gasoline, No. 6 heating oil) and past releases of fluids along the former railroad spur.

Why is an Amended Proposed Plan of Remedial Action necessary for the Chrysler Newark Assembly Plant Site (OU-3)?

The Amended Proposed Plan is necessary to redefine the area of AOC 3-1.

What is the environmental problem at the Chrysler Newark Assembly Plant Site (OU-3)?

Multiple environmental investigations were performed on the Site between 1985 and 2012. An environmental investigation was performed in 2008, on behalf of Chrysler, during which multiple areas of interest were identified within OU-3 as having the potential for soil and groundwater to have been negatively impacted due to past Site use activities (Figure 2). Soil and groundwater samples were collected across the operable unit during the Brownfield Investigation of OU-3 performed in 2010, on behalf of 1743 Holdings, LLC., with a greater quantity of samples collected in the previously identified areas of interest. Based on the results of all environmental investigations previously conducted on OU-3, two areas of concern (AOCs) were identified; each of which encompassed multiple areas of interest (Figure 3). AOC 3-1 included the former locations of the following: Shipping Yard, Powerhouse, North Tank Farm, and an underground storage tank called "Tank 11". AOC 3-2 included the former locations of the following: MCI Tower and an Executive Parking Garage. Contaminants of concern (COCs) were identified in soil for a restricted use (commercial/industrial) exposure scenario within AOC 3-1 and AOC 3-2. The COCs for soil for these areas consist of: metals, volatile organic compounds, (VOCs), semi-volatile organic compounds (SVOCs), pesticides and polychlorinated biphenyls (PCBs). There are no COCs for soil in OU-3 outside of AOC 3-1 and AOC 3-2. The COCs for groundwater in OU-3 consist of: metals, VOCs, SVOCs, and pesticides.

What clean-up actions have been taken at the Chrysler Newark Assembly Plant Site (OU-3)?

LNAPL monitoring and manual LNAPL removal has been conducted in the North Tank Farm and Tank 11 Areas.

What does the owner want to do at the Chrysler Newark Assembly Plant Site (OU-3)?

The entire Site is the future location of the University of Delaware's Science, Technology and Advanced Research (STAR) Campus. Portions of OU-3 will be utilized for infrastructure associated with future development, which will include buildings, underground utilities, access roads and parking.

What additional clean-up actions are needed at the Chrysler Newark Assembly Plant Site (OU-3)?

DNREC proposes the following remedial actions for the Site, which need to be completed before a Certificate of Completion of Remedy (COCR) can be issued.

1. A Remedial Action Work Plan must be submitted to DNREC for approval within 60 days of the issuance of the Final Plan of Remedial Action.

2. AOC 3-1 and AOC 3-2 must be capped with at least one foot of clean fill or impervious material (e.g. buildings, asphalt, or concrete) pursuant to the schedule indicated in the DNREC approved Remedial Action Work Plan.

3. Capping of PCB-contaminated soil in the former Shipping Yard area with a low-permeability cap (e.g. asphalt) to prevent future mobility.

4. Removal of measureable Light Non-Aqueous Phase Liquid (LNAPL) specifically associated with #6 fuel oil within AOC 3-1, thus reducing the elevated concentrations of VOCs and SVOCs in soil and groundwater to which future Site users would be exposed. Specifically in the Former Powerhouse Area, impacted soils will be excavated and properly disposed of off-site. A Remedial Action Work Plan must be provided to DNREC for approval prior to the start of remedial actions pertaining to LNAPL.

5. Designing and installing a vapor barrier system beneath the existing Administration Building and any other enclosed, continuously-occupied structures constructed on OU-3 within the boundary of AOC 3-1 and AOC 3-2 or within a 100-foot radius of the boundary of AOC 3-1 and AOC 3-2. The design must be provided to DNREC for review and approval prior to installation.

6. A proposed Environmental Covenant must be submitted to DNREC for approval within 60 days of the issuance of the approved Long Term Stewardship (LTS) Plan.

7. An Environmental Covenant, consistent with Delaware's Uniform Environmental Covenants Act (7 Del.C. Chapter 79, Subchapter II) must be recorded in the Office of the [County] Recorder of Deeds within 60 days of the issuance of the Long Term Stewardship Plan. The Environmental Covenant must include the following activity and/or use restrictions:

    [a.] Use Restriction. Use of the Property shall be restricted solely to those non-residential type uses permitted within Commercial, Manufacturing, or Industrial Districts; and restrict property use to "low occupancy" purposes (e.g. parking lot) atop capped PCB-. impacted soil;

[b.] Interference with Remedy. There shall be no digging, drilling, excavating, grading, constructing, earth moving, or any other land disturbing activities within the bounds of AOC 3-1 and AOC 3-2 without the prior written approval of DNREC;

[c.] Limitation of Groundwater Withdrawal. No groundwater wells shall be installed and no groundwater shall be withdrawn from any well on the Property without the prior written approval of DNREC-SIRS and DNREC Division of Water;

[d.] Compliance with the Long Term Stewardship Plan. All work required by the Long Term Stewardship Plan must be performed to DNREC's satisfaction in accordance with the Plan; and

[e.] Compliance with Contaminated Materials Management Plan. All work required by the Contaminated Materials Management Plan must be performed to DNREC's satisfaction in accordance with the Plan.

[f.] Modification to ground level building slabs or flooring where vapor intrusion systems have been installed requires prior written DNREC approval.

8. A Contaminated Materials Management Plan (CMMP) must be submitted to DNREC within 60 days of the issuance of the Final Plan of Remedial Action. The CMMP will provide guidance to enable construction workers to safely handle any potential contaminated soil and groundwater at the Site.

9. The CMMP will be implemented upon its approval by DNREC.

10. A Long-Term Stewardship Plan shall be submitted to DNREC for approval in accordance with the schedule set forth in the approved Remedial Action Work Plan. The LTS plan will detail: 1) the inspection schedule to be followed in order to ensure the long-term integrity of the cap placed atop impacted soil left in place, 2) the groundwater monitoring network and schedule to be followed in order to monitor the attenuation of the groundwater COCs; and 3) the testing procedure and schedule to be followed for the vapor barrier system, as well as the conditions under which it would be necessary to operate the system actively.

11. The LTS Plan must be implemented within 60 days of its approval by DNREC.

12. A request for a Certification of Completion of Remedy (COCR) must be submitted to DNREC within 60 days of approval of the Remedial Action Completion Report.

What Long-Term Stewardship (LTS) requirements are proposed for the Chrysler Newark Assembly Plant Site (OU-3)?

The LTS requirements proposed for the OU-3 portion of the Site include continued adherence to the environmental covenant recorded on the property deed, as well as, following the monitoring and inspection schedules set forth in the DNREC-approved LTS Plan.

How can I find additional information and/or comment on the Amended Proposed Plan?

The complete file on the Site, including the Environmental Site Assessment, Limited Current Conditions Assessment, and Brownfield Investigation Report, are available at the DNREC office, 391 Lukens Drive in New Castle. Most documents are also found on: http://www.nav.dnrec.delaware.gov/DEN3/

The 20-day public comment period begins on Wednesday, April 25, 2018, and ends at close of business (4:30 pm) on Tuesday, May 15, 2018. Please send written comments to the DNREC office at 391 Lukens Drive; New Castle, DE 19720 to the attention of Lindsay Hall, Project Manager.

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Figure 1: Site Location Map
Figure 2: OU-3 Areas of Interest
Figure 3: OU-3 Sample Location Map/Areas of Concern

Glossary of Terms Used in this Proposed Plan

Area of Concern (AOC)	A discrete section of the Site representing the local bounds of contamination in soil or groundwater
Brownfield Development Agreement (BDA)	This legal agreement is between a potential developer of a Delaware-certified Brownfields Site and the DNREC. The developer agrees to investigate and cleanup a Brownfields Site under the oversight of the Department in exchange for liability protection.
Brownfield Investigation (BFI)	Thorough environmental study of a Site which includes 1) sampling of site environmental media and/or wastes on the property and 2) conducting a preliminary risk assessment using the data collected to determine the risk posed to human health and the environment.
Certification of Completion of Remedy (COCR)	A formal determination by the Secretary of the DNREC that remedial activities required by the Final Plan of Remedial Action have been completed.
Certified Brownfield Site	A Brownfield Site that the DNREC has determined is eligible for some reimbursement funding through the Delaware Brownfields Program.
Contaminants of Concern (COC)	Potentially harmful substances at concentrations above acceptable levels
Contaminated Materials Management Plan (CMMP)	A written plan specifying how potentially contaminated material encountered at a Site will be sampled, evaluated, staged, transported and disposed of properly.
Exposure	Contact with a substance through inhalation (breathing in), ingestion (swallowing), or direct contact with the skin Exposure may be short term (acute) or long term (chronic).
Final Plan of Remedial Action	DNREC's adopted plan for cleaning up a hazardous site.
Hazardous Substance Cleanup Act (HSCA)	Delaware Code Title 7, Chapter 91. The law that enables DNREC to identify parties responsible for hazardous substances releases and requires cleanup with oversight of the Department.
Proposed Plan of Remedial Action	DNREC's initial plan for cleaning up a hazardous site, which is subject to public comment before being adopted as final.
Risk	Likelihood or probability of injury, disease, or death.
Uniform Environmental Covenant Act (UECA)	Deed restrictions on the site. These can include restrictions on soil intrusion, groundwater usage or usage of the site based on the extent of the cleanup.
Uniform Risk-Based Remediation Standards (URS)	A set of concentration criteria for various contaminants potentially present in site media that are developed for protection of human health and the environment
Vapor Barrier System	A liner is placed beneath the building foundation to trap any soil vapor, along with a piping system that will divert the soil vapor so that it will vent outside of the structure. The piping will also allow for future access to test the integrity of the system components.